

REMARKS

Claims 1, 4, 6-9, 11, 12, 14-19, 20, 21, 25-29, 32-38, 41-49, 52, 53 and 55-59 are presently under consideration. Claims 1, 4, 6-9, 11, 12, 14-19, 20, 21, 25-29, 32-38, 41-49, 52, 53 and 55-59 have been amended as shown on pp. 2-14 of the Reply. Claims 2, 3, 5, 10, 13, 22, 23, 24, 30, 31, 39-40, 50-51 and 54 have been cancelled.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 1, 2, 4, 6-14, 21, 24-31, 38, 41-44, 48-49, and 52-56 Under 35 U.S.C. §103(a)

Claims 1, 2, 4, 6-14, 21, 24-31, 38, 41-44, 48-49, and 52-56 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Patterson *et al.* (US 2003/0050008) in view of Lapaille *et al.* (US 6,539,214) and in further view of Gopalakrishnan *et al.* (US 2002/0110101). It is respectfully requested that this rejection be withdrawn for at least the following reasons. Neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.*, alone or in combination, discloses or suggests the features recited in the subject claims.

Applicants' claimed subject matter is directed to a method for adjusting the data rate of a message in a communication system. In particular, independent claim 1 has been amended to recite numerous features previously-recited in claim 2, which is now cancelled. Amended independent claim 1 recites:

*A method comprising: employing a processor executing computer readable instructions to perform the following acts: identifying a change in a return link signal quality at a gateway for a return link from a terminal communicatively coupled to the gateway through a satellite . . . wherein identifying the change in the return link signal quality comprises: identifying a change in a signal-to-noise ratio for the return link from the terminal; and interpreting the change in the signal-to-noise ratio as indicating the change in the return link signal quality . . . and adjusting a data rate . . . based in part on a determination made at the terminal to adjust the data rate to correct for degradation of the return link signal quality . . . wherein identifying the change in the return link signal and adjusting the data rate are performed **concurrently** by a transmitter of the message and a receiver of the message. (Emphasis added).*

Patterson *et al.* discloses a scalable satellite data communications system that provides global broadband services to earth-fixed cells. The system includes a user terminal segment and a gateway segment in the earth-fixed cells, and a space segment that includes satellites. The satellites are configured to provide communication of data between the user terminals in the user terminal segment and their associated gateway terminals in the gateway segment. One or more user terminals simultaneously transmit over a reverse link to their respective gateways via a satellite. By contrast, only the gateway transmits over the forward link, and transmits to the user terminals via the satellite.

The **gateway, not the user terminals**, monitors the reverse link conditions and adjusts the bandwidth allocated to the user terminals, and/or the data rate afforded to the user terminals, on the reverse link. The gateway controls each by allocating bandwidth and time slots to the user terminals for transmission according to the conditions being experienced on the reverse link. For example, in ideal environmental conditions, the full bandwidth and a high data rate may be allocated for the reverse link. By contrast, in poor environmental conditions, only a portion of the bandwidth may be allocated for transmission, and the data rate by which users can transmit may be decreased. Patterson *et al.* elaborates on the manner in which the gateway monitors and controls the bandwidth and data rate in the following excerpt from the disclosure:

For MF-TDMA operation, the reverse link channel may be subdivided in both the frequency and time domain into resource allocation units. The **gateway uses a medium access control (MAC) layer protocol to allocate these channel resources (bandwidth and time slots)** among user terminals on demand. The user terminals and gateway may use the MAC-layer protocol to negotiate the appropriate power level, modulation order, FEC coding rate, symbol rate, and time-slot assignments on the reverse link. The **gateway allocates resources** among user terminals based on the capacity requested by each user terminal, the available link capacity, and the waveforms that can be supported by the user terminal under the current link conditions. (Emphasis added).

Thus, identifying any change in the reverse link is performed by the gateway, not the user terminal. Further, **the user terminal**, which is the transmitter on the reverse link, **does not adjust its data rate until after the gateway adjusts the data rate** by adjusting the time slots in which the user terminal can transmit. The adjustment of the data rate happens when the gateway adjusts the timing and frequency of the time slots afforded to the user terminal. On the reverse

link, the user terminal is the transmitter and the gateway is the receiver. Therefore, Patterson *et al.* teaches that the data rate is adjusted at the transmitter of the message **after** the data rate is adjusted at the receiver of the message (**not concurrently with** the adjustment at the receiver). This is not the feature recited in amended independent claim 1 as: “*identifying the change in the return link signal and adjusting the data rate are performed **concurrently** by a transmitter of the message and a receiver of the message.*” (Emphasis added). For at least this reason, contrary to the assertion in the Office Action, Patterson *et al.* does not disclose or suggest the features recited in amended independent claim 1. Neither Lapaille *et al.* nor Gopalakrishnan *et al.* cure these deficiencies.

Lapaille *et al.* merely discloses a method of estimating a signal-to-noise ratio of a signal received at a terminal. The disclosure details a method for adjusting transmission power of the terminal based on the estimated signal-to-noise ratio.

Gopalakrishnan *et al.* merely discloses a method for adjusting the data rate in a system by varying modulation and coding. The data rate is adjusted based on the power and code space levels in a cell of interest. Accordingly, neither Lapaille *et al.* nor Gopalakrishnan *et al.* cure the deficiencies of Patterson *et al.*

In view of the foregoing, Applicants’ representative respectfully submits that neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.*, alone or in combination, discloses or suggests the features recited in amended independent claim 1 (or claims 4, 6-9, 11, 12, 14-19 and 20, which depend therefrom). Applicants’ representative therefore respectfully requests that the rejection of the subject claims be withdrawn.

Applicants’ claimed subject matter is directed to an apparatus for adjusting the data rate of a message in a communication system. In particular, independent claim 38 has been amended to recite numerous features previously-recited in claim 2, which is now cancelled. Amended independent claim 38 recites:

An apparatus comprising: a comparator configured to identify a change in a return link signal quality at a gateway for a return link from a terminal communicatively coupled to the gateway through a satellite . . . a data rate generator configured to adjust a data rate, at the terminal, based in part on a determination made at the terminal to adjust the data rate to correct for degradation of the return link signal quality, for a message sent from the terminal through the return link based on the change in the return link

*signal quality without changing link power levels and the interference relationship among the plurality of terminals . . . wherein identifying the change in the return link signal and adjusting the data rate are performed **concurrently** by a transmitter of the message and a receiver of the message.*(Emphasis added).

For similar reasons to those provided above for amended independent claim 1, neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.*, alone or in combination, disclose or suggest the features recited in amended independent claim 38 (or claims 41-48, which depend therefrom). Therefore, Applicants' representative respectfully requests that the rejection of the subject claims be withdrawn.

Applicants' claimed subject matter is directed to an apparatus for identifying a change in return link signal quality in a communication system. In particular, independent claim 21 has been amended to recite numerous features recited in amended dependent claim 6. Amended independent claim 21 recites:

*An apparatus comprising: means for identifying a change in a return link signal quality at a gateway for a return link between a terminal and a gateway . . . wherein the means for identifying the change in the return link signal quality comprises: a means for identifying a change in a signal-to-noise ratio for the return link from the terminal, the means comprising: . . . means for **approximating the signal-to-noise ratio for the return link . . . based on the forward link signal-to-noise ratio*** (Emphasis added).

Neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.*, alone or in combination, expressly or inherently discloses or suggests the features recited in amended independent claim 21. With regard to inherency as a basis for rejecting a claim pursuant to 35 U.S.C. § 103, the Manual of Patent Examining Procedure ("MPEP") states:

To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is **necessarily present** in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by **mere possibilities or even probabilities**. The mere fact that a certain thing **may** result from a given set of

circumstances is not sufficient. *See* MPEP § 2112(IV) (citing *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversing a rejection based on inherency because result due to optimization of conditions was not necessarily present in the prior art). (Emphasis added).

Applicants' representative submits that Patterson *et al.* fails to expressly disclose or suggest the features recited in amended independent claim 21. Further, Patterson *et al.* fails to inherently disclose or suggest the features recited in amended independent claim 21 because: (1) the assertions in the Office Action are based on **mere possibilities** as to the aspects of the system, and therefore **are not necessarily present** in the system of Patterson *et al.*, and (2) those skilled in the art **would not understand** the asserted features to be necessarily present in the system described in Patterson *et al.*

Patterson *et al.* fails to expressly disclose or suggest the features recited in amended independent claim 21. The Office Action asserts that Patterson *et al.* discloses the features “means for **approximating the signal-to-noise ratio for the return link . . . based on the forward link signal-to-noise ratio**” (emphasis added) in paragraphs [0101] and [0103] of Patterson *et al.* In particular, the Office Action states that Patterson *et al.* teaches “the link conditions include the condition or quality of the forward link.” Applicants' representative can find no such express or inherent teaching in the above-cited portion of Patterson *et al.* nor in any other portion of Patterson *et al.*

Rather, Patterson *et al.* makes clear that the data rates assigned by the gateway to the forward link and the reverse link are distinct and unrelated. The data rates on the **forward link** are determined by the gateway **based on the burstiness of the traffic on the forward link**; while the data rates on the **reverse link** are determined by the gateway **based on the environmental conditions, and based on the number of user terminals transmitting simultaneously on the reverse link**. Therefore, Patterson *et al.* discloses no interrelationship between the forward link and the reverse link nor the feature recited as “**approximating the signal-to-noise ratio for the return link . . . based on the forward link signal-to-noise ratio**” (emphasis added).

Further, it would not be obvious for one of ordinary skill in the art to modify Patterson *et al.* to a system that includes the feature recited as “**approximating the signal-to-noise ratio for the return link . . . based on the forward link signal-to-noise ratio**” because there is very little

correlation between signal-to-noise ratio on the forward link in Patterson *et al.* to the signal-to-noise ratio of the reverse link in Patterson *et al.* because the number of users transmitting on the links are drastically different, and such will always affect the signal-to-noise ratio.

Second, Patterson *et al.* fails to inherently disclose or suggest the features recited in amended independent claim 21. Such is the case because: (1) the assertions in the Office Action are based on **mere possibilities** as to the aspects of the system, and therefore **are not necessarily present** in the system of Patterson *et al.*, and (2) those skilled in the art **would not understand** the asserted features to be necessarily present in the system described in Patterson *et al.*

The assertion in the Office Action that “the link conditions include the condition or quality of the forward link” is a statement of **mere possibility** as to whether the forward link conditions are considered by the gateway in determining the reverse link conditions. As described above, Patterson *et al.* discloses distinct data rates and user traffic conditions as between the reverse link and the forward link. Therefore, the reverse link condition is apparently determined based on the reverse link, not the forward link. Further, the occurrence of the reverse link condition being determined by the forward link condition is a **mere possibility that is not necessarily present** in Patterson *et al.* It is wholly possible that the reverse link is not determined based on the forward link in Patterson *et al.* for at least the reasons provided above for amended independent claim 21. For at least this reason, the feature recited as “*approximating the signal-to-noise ratio for the return link . . . based on the forward link signal-to-noise ratio*” (emphasis added) is **not necessarily present** in the system disclosed in Patterson *et al.*

Additionally, because the signal-to-noise ratio on the forward link bears little to no correlation with the signal-to-noise ratio on the reverse link, due to the disparate data rates and traffic conditions on the links, those skilled in the art would not understand the feature: “*approximating the signal-to-noise ratio for the return link . . . based on the forward link signal-to-noise ratio*” (emphasis added) to be **necessarily present** in the system disclosed in Patterson *et al.* Those skilled in the art would not understand such to be the case because the signal-to-noise ratio on the forward link would not be a reliable indicator of the signal-to-noise ratio on the reverse link. Signals on the reverse link experience interference from signals from other user terminals as well as multipath interference created by multiple paths of their own signals. To the contrary, signals on the forward link do not experience interference from signals

from other user terminals. Additionally, the reverse link may provide traffic over a widely varying range of data rates, while the forward link provides bursty traffic of high data rates. Accordingly, those skilled in the art **would not understand** the asserted features recited as: *“approximating the signal-to-noise ratio for the return link . . . based on the forward link signal-to-noise ratio”* (emphasis added) to be **necessarily present** in the system described in Patterson *et al.*

Applicants’ representative respectfully submits that, based on the reasons provided above, the features recited in amended independent claim 21 are not expressly or inherently disclosed or suggested in Patterson *et al.* Based on the description of the disclosures for Lapaille *et al.* and Gopalakrishnan *et al.* provided with reference to amended independent claim 1, neither Lapaille *et al.* nor Gopalakrishnan *et al.* cure these deficiencies.

In view of the foregoing, Applicants’ representative respectfully submits that neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.*, alone or in combination, discloses or suggests the features recited in amended independent claim 21 (or claims 25-29 and 32-37, which depend therefrom). Applicants’ representative therefore respectfully requests that the rejection of the subject claims be withdrawn.

Applicants’ claimed subject matter is directed to a machine readable medium having machine executable instructions stored on the medium for messaging in a communication system. In particular, independent claim 49 has been amended to recite numerous features recited in claim 17. Amended independent claim 49 recites:

A machine readable medium having stored thereon machine executable instructions adapted for performing a method comprising: identifying a change in a return link signal quality at a gateway for a return link from a terminal communicatively coupled to the gateway through a satellite . . . receiving a feedback signal at the terminal, from the gateway, the feedback signal indicating at least one of the signal-to-noise ratio for the return link as measured at the gateway or the change in the signal-to-noise ratio for the return link as measured at the gateway; and adjusting a data rate . . . for a message sent from the terminal through the return link . . . wherein the return link comprises a messaging time slot among a plurality of time slots in each of a series of time frames, and the sent message is initiated at a random time within the messaging time slot. (Emphasis added).

The Office Action admits that neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.* disclose or suggest the features recited as a “*sent message is initiated at a random time within the messaging time slot*” (emphasis added). Based on the descriptions of Patterson *et al.*, Lapaille *et al.* and Gopalakrishnan *et al.* provided above with reference to amended independent claims 1, 38 and 21, Applicants’ representative agrees. However, contrary to the assertion in the Office Action, Hogberg *et al.* does not cure these deficiencies.

Rather, Hogberg *et al.* merely discloses a dual mode satellite communications system including satellites having transmitters configured with time division multiple access (“TDMA”) channelizers, time division (“TD”) channelizers and code division multiple access (“CDMA”) channelizers. The channelizers are configured for providing TDMA/FDMA, CDMA/FDMA, TD/CDMA and TD/CDMA/TDMA channel resource allocation schemes. Hogberg *et al.* fails to disclose or suggest any aspects of the above medium access control (“MAC”) protocols that vary from the **well-known and conventional protocols** when considered independently.

Applicants’ representative submits that, as between TDMA, TD and CDMA, only the TDMA and the TD schemes disclose the feature recited as “*sent message . . . within the messaging time slot*” (emphasis added). As there is no concept of a messaging time slot in CDMA. Accordingly, only TD and TDMA may be considered for disclosing or suggesting the remaining above-recited features of amended independent claim 49.

As is well-known in the art, none of the above protocols include a feature wherein a “*sent message is initiated at a random time within the messaging time slot*” (emphasis added). To the contrary, in TDMA, for example, a channel into frequency allocations and the frequency allocations are divided into time slots. Each user is assigned a time slot in which to transmit, and guard times are usually inserted between subsequent user time slots to reduce the probability of an overlap in transmission. In order to transmit the most information possible during the time slot, a user’s message is sent immediately after the guard time has passed. Accordingly, for at least this reason, contrary to the assertion in the Office Action, disclosure of a TDMA scheme (whether alone or in combination with another scheme) does not disclose or suggest the feature recited as “*sent message is initiated at a random time within the messaging time slot*” (emphasis added).

As is also well-known in the art, TD is a time division duplexing scheme wherein an entire channel is divided into time slots. Alternating time slots facilitate transmission in alternating directions. The TD facilitates communication between two users. The first user transmits to the second user in the first time slot and the second user transmits to the first user in the second time slot. Again, users transmit at the first opportunity to do so within the user's assigned time slot. As such, contrary to the assertion in the Office Action, disclosure of a TD scheme (whether alone or in combination with another scheme) does not disclose or suggest the feature recited as "*sent message is initiated at a random time within the messaging time slot*" (emphasis added).

Further, and contrary to the Office Action, Hogberg *et al.* teaches nothing more than these conventional approaches. Specifically, Hogberg *et al.* teaches that: (1) the TDMA/FDMA scheme is "capable of 'channelizing' a 10 MHz bandwidth of spectrum into . . . separate frequency channels each approximately 41 KHz wide using four time slots"; (2) the CDMA/FDMA scheme "can provide as many as 64 codes (Walsh codes) using perhaps three or four distinct frequency bands; (3) the TD/CDMA scheme can "provide four time slots with 64 codes in a single frequency band"; and (4) the TD/CDMA/TDMA scheme can "provide four time slots with 64 codes with three or four distinct frequency bands." Accordingly, Hogberg *et al.* also fails to disclose or suggest the feature recited as "*sent message is initiated at a random time within the messaging time slot*" (emphasis added). For each of these reasons, Hogberg *et al.* does not cure the deficiencies of Patterson *et al.*, Lapaille *et al.* and Gopalakrishnan *et al.*

In view of at least the foregoing, it is respectfully submitted that neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.*, alone or in combination, discloses or suggests the features recited in the subject claims. Accordingly, Applicants' representative respectfully requests that the rejection of amended independent claim 49 (and claims 52, 53 and 55-59, which depend therefrom) be withdrawn.

II. Rejection of Claims 17 and 34 Under 35 U.S.C. §103(a)

Claims 17 and 34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Patterson *et al.* (US 2003/0050008) in view of Lapaille *et al.* (US 6,539,214) in view of Gopalakrishnan *et al.* (US 2002/0110101) as applied to claims 1 and 21, and further in view of Hogberg *et al.* (US 6,198,730). It is respectfully requested that this rejection be withdrawn for at

least the following reasons. Neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.* nor Hogberg *et al.*, alone or in combination, discloses or suggests the features recited in the subject claims.

Applicants' claimed subject matter is directed to methods and apparatus for adjusting the data rate of a message in a communication system. In particular, amended dependent claim 17 recites "*the method of claim 1, wherein the return link comprises a messaging time slot among a plurality of time slots in each of a series of time frames, the method further comprising **initiating the message at a random time within the messaging time slot***" (emphasis added). Additionally, amended dependent claim 34 recites: "*the apparatus of claim 21, wherein the return link comprises a messaging time slot among a plurality of time slots in each of a series of time frames, the apparatus further comprising means for **initiating the message at a random time within the messaging time slot***" (emphasis added).

Based on at least the reasons provided above for amended independent claim 49, it is respectfully submitted that neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.* nor Hogberg *et al.*, alone or in combination, discloses or suggests the features recited in the claim 17 or in claim 34. Accordingly, Applicants' representative respectfully requests that the rejection of claim 17, and the rejection of claim 34, be withdrawn.

III. Rejection of Claims 15-16, 18-20, 32-33, 35-37, 45-47, and 57-59 Under 35 U.S.C. §103(a)

Claims 15-16, 18-20, 32-33, 35-37, 45-47, and 57-59 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Patterson *et al.* (US 2003/0050008) in view of Lapaille *et al.* (US 6,539,214) in view of Gopalakrishnan *et al.* (US 2002/0110101) as applied to claims 1, 21, 38, and 49, and further in view of Xie *et al.* (US 6,781,978). It is respectfully requested that this rejection be withdrawn for at least the following reasons. Neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.* nor Xie *et al.*, alone or in combination, discloses or suggests the features recited in the subject claims.

Applicants' claimed subject matter relates to methods for adjusting the data rate of a message in a communication system. In particular, amended dependent claims 15, 16 and 18-20 each depend from and therefore incorporate the features recited in amended independent claim 1. Accordingly, for at least the reasons provided above with reference to amended independent

claim 1, neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.* disclose or suggest each of the features incorporated into amended dependent claims 15,16 and 18-20. In particular, none of the references disclose or suggest the features recited as “*identifying the change in the return link signal and adjusting the data rate are performed **concurrently** by a transmitter of the message and a receiver of the message*” (emphasis added). Xie *et al.* does not cure this deficiency.

Xie *et al.* merely discloses a medium access control (MAC) protocol for accessing a communication channel by monitoring transmission energy associated with another transmitter and transmitting if the transmission energy is below a selected threshold. Xie *et al.* fails to disclose or suggest the features incorporated from amended independent claim 1.

In view of at least the foregoing, it is respectfully submitted that neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.* nor Xie *et al.*, alone or in combination, discloses or suggests the features incorporated into the subject claims. Accordingly, Applicants’ representative respectfully requests that the rejection of claims 15-16 and 18-20 be withdrawn.

Applicants’ claimed subject matter is directed to different apparatus for identifying a change in return link signal quality in a communication system. In particular, amended dependent claims 32, 33 and 35-37 each depend from and therefore incorporate the features recited in amended independent claim 21. Accordingly, for at least the reasons provided above with reference to amended independent claim 21, neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.* disclose or suggest each of the features incorporated into amended dependent claims 32, 33 and 35-37. In particular, none of the references disclose or suggest the features recited as “*means for **approximating the signal-to-noise ratio for the return link . . . based on the forward link signal-to-noise ratio . . .***” (Emphasis added). Based on at least the description of Xie *et al.* provided above with reference to amended dependent claims 15, 16 and 18-20, Xie *et al.* fails to cure these deficiencies.

In view of at least the foregoing, it is respectfully submitted that neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.* nor Xie *et al.*, alone or in combination, discloses or suggests the features incorporated into the subject claims. Accordingly, Applicants’ representative respectfully requests that the rejection of claims 32, 33 and 35-37 be withdrawn.

Applicants' claimed subject matter is directed to different apparatus for adjusting the data rate of a message in a communication system. In particular, amended dependent claims 45-47 each depend from and therefore incorporate the features recited in amended independent claim 38. Accordingly, for at least the reasons provided above with reference to amended independent claim 38, neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.* disclose or suggest each of the features incorporated into amended dependent claims 45-47. In particular, none of the references disclose or suggest the features recited as "*wherein identifying the change in the return link signal and adjusting the data rate are performed concurrently by a transmitter of the message and a receiver of the message.*" (Emphasis added).

Based on at least the description of Xie *et al.* provided above with reference to amended dependent claims 15, 16 and 18-20, Xie *et al.* fails to cure these deficiencies.

In view of at least the foregoing, it is respectfully submitted that neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.* nor Xie *et al.*, alone or in combination, discloses or suggests the features incorporated into the subject claims. Accordingly, Applicants' representative respectfully requests that the rejection of claims 45-47 be withdrawn.

Applicants' claimed subject matter is directed to machine readable mediums having machine executable instructions stored on the medium for messaging in a communication system. In particular, amended dependent claims 57-59 each depend from and therefore incorporate the features recited in amended independent claim 49. Accordingly, for at least the reasons provided above with reference to amended independent claim 49, neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.* disclose or suggest each of the features incorporated into amended dependent claims 57-59. In particular, none of the references disclose or suggest the features recited as "*wherein the return link comprises a messaging time slot among a plurality of time slots in each of a series of time frames, and the sent message is initiated at a random time within the messaging time slot.*" (Emphasis added). Based on at least the description of Xie *et al.* provided above with reference to amended dependent claims 15, 16 and 18-20, Xie *et al.* fails to cure these deficiencies.

In view of at least the foregoing, it is respectfully submitted that neither Patterson *et al.* nor Lapaille *et al.* nor Gopalakrishnan *et al.* nor Xie *et al.*, alone or in combination, discloses or

suggests the features incorporated into the subject claims. Accordingly, Applicants' representative respectfully requests that the rejection of claims 57-59 be withdrawn.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [QUALP802USA].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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